

Amendments to Specification

Please amend the two paragraphs starting at page 2, line 20 as follows:

Referring now to Fig. 1 a slower rate or "slow" video signal is input to a frame rate converter **12** that up-samples the slower rate video signal to a desired higher rate video signal. The higher rate video signal is then input to a three-dimensional (3D) human vision model (HVM) adaptive filter **14**, such as that described in co-pending U.S. Patent Application Serial No. ~~09/858,775~~ filed by the present inventor on May 16, 2001 6,907,143 entitled "Adaptive Spatio-Temporal Filter for Human Vision Model ~~Systems~~ System Models." The output from the HVM adaptive filter **14** is a temporally smooth, not necessarily blurred, interpolated video signal at the higher rate without any direct current (DC) component. The output from the HVM adaptive filter **14** together with the up-sampled slower rate video signal from the frame rate converter **12** are input to a DC restore circuit **16**, as the HVM adaptive filter eliminates the DC component of the up-sampled slower rate video signal. The DC restore circuit **16** determines the DC level from the up-sampled slower rate video signal and adds that to the smooth interpolated video signal to produce the final output "smooth" interpolated video signal. In some instances the DC restore circuit **16** may be eliminated. Otherwise the DC level added to the smooth interpolated video signal by the DC restore circuit **16** may be a constant, may be based on average picture level (APL) from the up-sampled slower rate video signal, or may be determined in any other way that is well known in the art.

The HVM adaptive filter **14** is a plurality of filters composed of a common building block, as shown in Fig. 2 of referenced U.S. Patent Application Serial No. ~~09/858,775~~ 6,907,143. This is a recursive filter architecture where the output of the filter is multiplied by a constant less than one, delayed and fed back to the input for combining with the next frame in sequence. The recursive nature of the HVM adaptive filter results in the interpolation of the up-sampled slower rate video signal into the smooth interpolated video signal.